9/3,AB/2 (Item 2 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

10185971 20038959
Geographical distribution of hepatitis E virus **genotypes]**
Repartition geographique des genotypes du virus de l'hepatite E.
Grandadam M; Nicand E; Van Cuyck-Gandre H; Buisson Y
Laboratoire de biologie clinique, Hopital d'instruction des armees Val-de-Grace, Paris, France.
Bulletin de la Societe de pathologie exotique (FRANCE) Sep-Oct 1999, 92 (4) p274-7, Journal Code: BK9
Languages: FRENCH Summary Languages: ENGLISH
Document type: JOURNAL ARTICLE ; English Abstract
Hepatitis E virus (HEV) is the major agent of acute hepatitis in developing countries where the infection occurs sporadically or in large waterborne epidemics. HEV, classified in the Caliciviridae, is not culturable. The detection of HEV RNA by RT-PCR in serum and stool samples is reliable during the 7 to 15 days following the onset of the disease. Restriction endonuclease analysis, cloning and sequencing of PCR products allow a phylogenetic analysis of HEV isolates. Although they belong to a single serotype, strains recovered from different geographical regions display a significant genetic heterogeneity. Sequencing data from ORF1 and ORF2 regions has led to the characterization of 3 distinct genotypes: genotype I gathering the Asian and African subgenotypes; genotype II gathering swine and human **US strains** ; genotype III limited to the Mexico prototype. Novel variants are currently described from Africa (Nigeria), China and Europe (Greece and Italy). Each genotype appears to be related to a well defined geographical area. Nevertheless, a genetic variability is observed within endemic regions such as Asia or Africa. Nigerian endemic isolates especially could represent an intermediate stage in the evolutionary process towards genetic diversity. The animal reservoir, proved by the detection of HEV sequences by PCR among pigs in Nepal and in the USA, could help to resolve unanswered questions about the origin of HEV genotypes, their spread and evolution.

9/3,AB/4 (Item 1 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

130308796 CA: 130(23)308796t PATENT
Methods and compositions for detecting hepatitis E virus and for immunizing against or treating infection
INVENTOR(AUTHOR): Schlauder, George G.; Erker, James C.; Desai, Suresh M. ; Dawson, George J.; Mushahwar, Isa K.
LOCATION: USA
ASSIGNEE: Abbott Laboratories
PATENT: PCT International ; WO 9919732 A1 DATE: 19990422
APPLICATION: WO 98US21941 (19981015) *US 61199 (19971015)
PAGES: 260 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: G01N-033/576A; G01N-033/577B; C07K-014/08B; C07K-016/10B; A61K-039/29B
DESIGNATED COUNTRIES: CA; JP DESIGNATED REGIONAL: AT; BE; CH; CY; DE; DK ; ES; FI; FR; GB; GR; IE; IT; LU; MC; NL; PT; SE
?

18/3,AB/5 (Item 5 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

09456428 98178637
The sequence and phylogenetic analysis of a novel hepatitis E virus **isolated from a patient with acute hepatitis reported in the** United States **[published erratum appears in J Gen Virol 1998 Oct;79(Pt 10):2563]**
Schlauder GG; Dawson GJ; Erker JC; Kwo PY; Knigge MF; Smalley DL; Rosenblatt JE; Desai SM; Mushahwar IK
Abbott Laboratories, Virus Discovery Group, Experimental Biology Research, North Chicago, IL 60064, USA. george.schlauder@add.ssw.abbott.com
Journal of general virology (ENGLAND) Mar 1998, 79 (Pt 3) p447-56, ISSN 0022-1317 Journal Code: I9B
Languages: ENGLISH
Document type: JOURNAL ARTICLE
A variant of **hepatitis E virus** (HEV), designated HEV **US** -1, was identified in a hepatitis patient in the **United States** (**US**); the patient had no history of travel to areas where HEV is endemic. Nucleotide sequences were obtained from the 5' end of open reading frame (ORF) 1 (1418 nt), the 3' end of ORF1 (1359 nt), the entire ORF2 and ORF3 regions, and the 3'-untranslated region (2127 nt). The HEV **US** -1 strain is significantly divergent from other human HEV isolates with nucleotide identities ranging from 76.8 to 77.5%. Phylogenetic analyses indicate that HEV **US** -1 and a recently discovered HEV variant from swine may represent separate isolates of a new strain of HEV, significantly divergent from the Mexican and Burmese strains. Synthetic peptides derived from the carboxyl amino acids of ORF2 and ORF3 were shown to be useful for detecting exposure to HEV. In addition, IgM class antibodies directed against HEV **US** -1 synthetic peptides were detected in the **US** patient infected with HEV **US** -1, but were absent using synthetic peptides from the Burmese or Mexican strains of HEV. A preferential reactivity to HEV **US** -1 specific peptides has lead to the identification of a second isolate of this virus also from a patient with acute hepatitis from the **US** . The discovery of these HEV variants may be important in understanding the worldwide distribution of HEV infection.

18/3,AB/7 (Item 7 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

09167349 97350971
Prevalence of and risk factors for antibody to hepatitis E virus **seroreactivity among blood donors in Northern California.**
Mast EE; Kuramoto IK; Favorov MO; Schoening VR; Burkholder BT; Shapiro CN ; Holland PV
Division of Viral and Rickettsial Diseases, National Center for Infectious Diseases, Centers for Disease Control and Prevention, Atlanta, Georgia 30333, USA.
Journal of infectious diseases (UNITED STATES) Jul 1997, 176 (1) p34-40, ISSN 0022-1899 Journal Code: IH3
Languages: ENGLISH
Document type: JOURNAL ARTICLE
To evaluate antibody to **hepatitis E virus** (anti-HEV) seroreactivity, 5000 **US** blood donors were tested for anti-HEV by two EIAs: a mosaic protein assay (MPr-EIA) and a recombinant protein assay (RPr-EIA). Overall, 59 (1.2%) were seroreactive by MPr-EIA and 70 (1.4%) were seroreactive by RPr-EIA. The overall concordance between tests was 98.5% (4925/5000); the concordance among reactive sera by either test was only 27% (27/102). In a case-control study, seroreactive persons were more

likely than seronegative persons to have traveled to countries in which HEV is endemic (odds ratio [OR] for MPr-EIA = 4.3, P < .001; OR for RPr-EIA = 2.5, P = .005), but 31% of MPr-EIA anti-HEV-reactive persons and 38% of RPr-EIA anti-HEV-reactive persons had no history of international travel. These findings suggest that travelers to regions in which HEV is endemic can acquire subclinical HEV infection. The significance of anti-HEV seroreactivity among persons without an international travel history needs to be determined.

18/3,AB/12 (Item 12 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

07267613 92349831
Detection of long-lasting antibody to hepatitis E virus **in a** US **traveller to Pakistan [letter]**
Dawson GJ; Mushahwar IK; Chau KH; Gitnick GL
Lancet (ENGLAND) Aug 15 1992, 340 (8816) p426-7, ISSN 0140-6736
Journal Code: L0S
Languages: ENGLISH
Document type: LETTER

18/3,AB/13 (Item 1 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

11131243 BIOSIS NO.: 199799752388
A novel virus in swine in closely related to the human hepatitis E virus.
AUTHOR: Meng Xiang-Jin(a); Purcell Robert H; Halbur Patrick G; Lehman James R; Webb Dale M; Tsareva Tatiana S; Haynes Joseph S; Thacker Brad J; Emerson Suzanne U
AUTHOR ADDRESS: (a)Hepatitis Viruses Sect., Lab. Infect. Dis., Natl. Inst. Allergy Infect. Dis., 7 Center Dr., MSC **USA
JOURNAL: Proceedings of the National Academy of Sciences of the United States of America 94 (18):p9860-9865 1997
ISSN: 0027-8424
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: A novel virus, designated swine **hepatitis E virus** (swine HEV), was identified in pigs. Swine HEV crossreacts with antibody to the human REV capsid antigen. Swine HEV is a ubiquitous agent and the majority of swine gtoreq 3 months of age in herds from the midwestern **United States** were seropositive. Young pigs naturally infected by swine HEV were clinically normal but had microscopic evidence of hepatitis, and developed viremia prior to seroconversion. The entire ORFs 2 and 3 were amplified by reverse transcription-PCR from sera of naturally infected pigs. The putative capsid gene (ORF2) of swine HEV shared about 79-80% sequence identity at the nucleotide level and 90-92% identity at the amino acid level with human HEV strains. The small ORF3 of swine HEV had 83-85% nucleotide sequence identity and 77-82% amino acid identity with human HEV strains. Phylogenetic analyses showed that swine HEV is closely related to, but distinct from, human HEV strains. The discovery of swine HEV not only has implications for HEV vaccine development, diagnosis, and biology, but also raises a potential public health concern for zoonosis or xenozoonosis following xenotransplantation with pig organs.

1997

18/3,AB/14 (Item 1 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

07101476 Genuine Article#: 124MQ Number of References: 1
Title: The sequence and phylogenetic analysis of a novel hepatitis E virus **isolated from a patient with acute hepatitis reported in the** United States **(vol 79, pg 447, 1998)**
Author(s): Schlauder GG; Dawson GJ; Erker JC; Kwo PY; Knigge MF; Smalley DL ; Rosenblatt JE; Desai SM; Mushahwar IK
Journal: JOURNAL OF GENERAL VIROLOGY, 1998, V79, 10 (OCT), P2563-2563
ISSN: 0022-1317 Publication date: 19981000
Publisher: SOC GENERAL MICROBIOLOGY, MARLBOROUGH HOUSE, BASINGSTOKE RD, SPENCERS WOODS, READING RG7 1AE, BERKS, ENGLAND
Language: English Document Type: CORRECTION, ADDITION

18/3,AB/22 (Item 9 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

01888220 Genuine Article#: JJ449 Number of References: 6
Title: DETECTION OF LONG-LASTING ANTIBODY TO HEPATITIS- E VIRUS **IN A** UNITED- STATES **TRAVELER TO PAKISTAN**
Author(s): DAWSON GJ; MUSHAHWAR IK; CHAU KH; GITNICK GL
Corporate Source: ABBOTT LABS,EXPTL BIOL RES/N CHICAGO//IL/60064; UNIV CALIF LOS ANGELES/LOS ANGELES//CA/90024
Journal: LANCET, 1992, V340, N8816 (AUG 15), P426-427
Language: ENGLISH Document Type: LETTER

18/3,AB/23 (Item 1 from file: 71)
DIALOG(R)File 71:ELSEVIER BIOBASE

00988340 1998234604
Corrigendum: The sequence and phylogenetic analysis of a novel hepatitis E virus **isolated from a patient with acute hepatitis reported in the** United States **(Journal of General Virology (1998) 79 (447-456))**
Schlauder G.G.; Dawson G.J.; Erker J.C.; Kwo P.Y.; Knigge M.F.; Smalley D.L.; Rosenblatt J.E.; Desai S.M.; Mushahwar I.K.
Journal: Journal of General Virology, 79/10 (2563), 1998, United Kingdom
CODEN: JGVIA
ISSN: 0022-1317
DOCUMENT TYPE: Erratum
LANGUAGES: English
NO. OF REFERENCES: 0

18/3,AB/30 (Item 1 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

129298934 CA: 129(23)298934z JOURNAL
The sequence and phylogenetic analysis of a novel hepatitis E virus isolated from a patient with acute hepatitis reported in the United States. (Erratum to document cited in CA128:290911)
AUTHOR(S): Schlauder, George G.; Dawson, George J.; Erker, James C.; Kwo,

Paul Y.; Knigge, Mark F.; Smalley, David L.; Rosenblatt, Jon E.; Desai, Suresh M.; Mushahwar, Isa K.
LOCATION: Virus Discovery Group, Experimental Biologoy Research, Abbott Laboratories, North Chicago, IL, 60064, USA
JOURNAL: J. Gen. Virol. DATE: 1998 VOLUME: 79 NUMBER: 10 PAGES: 2563
CODEN: JGVIAY ISSN: 0022-1317 LANGUAGE: English PUBLISHER: Society for General Microbiology

18/3,AB/31 (Item 1 from file: 77)
DIALOG(R)File 77:Conference Papers Index

4371398
Supplier Accession Number: 98-04408 V26N04
Novel hepatitis E virus (HEV) isolates from patients with acute hepatitis in the United States and Europe: Evidence for at least four major genotypes of HEV
Schlauder, G.G.; Dawson, G.J.; Erker, J.C.; Desai, S.M.; Kwo, P.Y.; Smalley, D.L.; Knigge, M.F.; Rosenblatt, J.E.; Zanetti, A.; Mushahwar, I.K.
Abbott Labs., N. Chicago, IL, USA
International Conference on Emerging Infectious Diseases 9815009 Atlanta, GA (USA) 8-11 Mar 1998
Centers for Disease Control and Prevention, Council of State and Territorial Epidemiologists, American Society for Microbiology, National Foundation for CDC
Centers for Disease Control and Prevention, 1600 Clifton Road, NE, Atlanta, GA 30333, USA; phone: (404) 639-3311; URL: http://www.cdc.gov, Abstracts available.

18/3,AB/32 (Item 2 from file: 77)
DIALOG(R)File 77:Conference Papers Index

4238470
Supplier Accession Number: 96-05430 V24N05
Partial sequence comparison of a United States isolate of hepatitis E virus
Dawson, G.; Schlauder, G.; Kwo, P.; Gabriel, G.; Mushahwar, I.
IX Triennial International Symposium on Viral Hepatitis and Liver Disease 9620530 Rome (Italy) 21-25 Apr 1996
Abbott S. p. A.--Divisione Diagnostici; Merck, Sharp & Dohme/Pasteur Merieux MSD; SmithKline Beechham; Sorin Biomedica Diagnostics S. p. A.
Scientific Secretariat, Mario Rizzetto, c/o CpA Srl, Vaile delle Medaglie d'Oro, 342, 00136 Roma - Italy, Selected abstracts available. Poster Paper No. A103
?

32/3,AB/1 (Item 1 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

09356754 98075213
Acute hepatitis E by a new isolate acquired in the United States [see comments]
Kwo PY; **Schlauder GG** ; Carpenter HA; Murphy PJ; Rosenblatt JE; Dawson GJ ; Mast EE; Krawczynski K; Balan V
Division of Gastroenterology and Internal Medicine, Mayo Clinic Rochester, Minnesota 55905, USA.
Mayo Clinic proceedings (UNITED STATES) Dec 1997, 72 (12) p1133-6, ISSN 0025-6196 Journal Code: LLY
Comment in Mayo Clin Proc 1997 Dec;72(12):1197-8
Languages: ENGLISH
Document type: JOURNAL ARTICLE
OBJECTIVE: To report the first case of acute hepatitis E by a novel isolate acquired in the United States and confirmed by nucleotide sequencing. MATERIAL AND METHODS: We describe the clinical manifestations and the results of associated laboratory studies in a man who was found to have acute hepatitis E infection. RESULTS: A 62-year-old man was hospitalized because of fever, abdominal pain, and jaundice. After an initial evaluation did not provide a cause, his serum was found to be positive for IgG anti- **hepatitis E virus** (HEV) by three antibody assays. Serum was also positive for HEV RNA by reverse transcriptase polymerase chain reaction (PCR). Sequencing results from the PCR products demonstrated substantial differences at the nucleotide level between this strain and the known Mexican and Burmese strains. CONCLUSION: On the basis of this initial report, HEV should be considered an etiologic agent in patients with acute non-ABC hepatitis in the United States.

32/3,AB/6 (Item 6 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

08186220 94351046
Detection of hepatitis C and E virus by the polymerase chain reaction.
Schlauder GG ; Mushahwar IK
Experimental Biology Research, Abbott Laboratories, North Chicago, IL 60064.
Journal of virological methods (NETHERLANDS) May 1994, 47 (3) p243-53, ISSN 0166-0934 Journal Code: HQR
Languages: ENGLISH
Document type: JOURNAL ARTICLE; REVIEW; REVIEW, TUTORIAL

32/3,AB/11 (Item 11 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

07429173 92355735
Solid-phase enzyme-linked immunosorbent assay for hepatitis E virus **IgG and IgM antibodies utilizing recombinant antigens and synthetic peptides.**
Dawson GJ; Chau KH; Cabal CM; Yarbough PO; Reyes GR; **Mushahwar IK**
Experimental Biology Research, Abbott Laboratories, North Chicago, Illinois 60064.
Journal of virological methods (NETHERLANDS) Jul 1992, 38 (1) p175-86, ISSN 0166-0934 Journal Code: HQR
Languages: ENGLISH

Document type: JOURNAL ARTICLE

Four recombinant antigens representing two distinct antigenic domains from two different strains of **hepatitis E virus** (HEV), were used individually to develop four ELISAs designed to detect antibodies to HEV. Both IgG and IgM class antibodies to HEV were detected in 7 of 8 pedigreed serum/plasma from known outbreaks of HEV in Mexico, Burma, Somalia and Pakistan. In addition, specific HEV-antibodies were detected in cynomolgus macaques following inoculation with various HEV strains. Anti-HEV was also detected in 8 of 386 (2.1%) randomly selected American blood donors. Supplemental tests utilizing both synthetic peptides and specific blocking assays provided additional serologic data confirming the presence of anti-HEV. Similar prevalence studies on a limited number of available sera from other geographical regions (Alaska, Japan, Germany, New Zealand, Thailand and Mexico) confirmed the presence of anti-HEV in at least 1.1 to 7.6% of the specimens.

32/3,AB/16 (Item 5 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

09237817 BIOSIS NO.: 199497246187
Determination of hepatitis E virus **seroprevalence by using recombinant fusion proteins and synthetic peptides.**
AUTHOR: Paul Deborah A(a); Knigge Mark F; Ritter Anne; Gutierrez Robin; Pilot-Matias Tami; Chau Kurt H; **Dawson George J**
AUTHOR ADDRESS: (a)Exp. Biol. Res., Abbott Lab., 1401 Sheridan Road, North Chicago, IL 60064**USA
JOURNAL: Journal of Infectious Diseases 169 (4):p801-806 1994
ISSN: 0022-1899
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: Recombinant antigens from **hepatitis E virus** (HEV) open-reading frames 2 and 3 were expressed in Escherichia coli as cytidine monophosphate-2-keto-3-deoxyoctulosonic acid synthetase (CKS) fusion proteins, purified, and used to develop an EIA for the detection of antibodies. Serologic results were compared with those of previous assays by testing 102 samples from an HEV outbreak in Somalia. This CKS/HEV EIA detected anti-HEV in all 97 sera found reactive previously and in an additional 2 samples, which were shown to be true HEV-positive samples by supplemental peptide and Western blot tests. The CKS/HEV EIA and supplemental assays were then used to determine seroprevalence of HEV worldwide. HEV seroprevalence ranged from 1% to 25%, with higher rates found in Middle Eastern countries. Also, 7%-14% of acute cases of non-A, -B, or -C hepatitis were HEV-positive. Thus, this CKS/HEV EIA appears useful for detecting anti-HEV in various populations.

1994

32/3,AB/20 (Item 1 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

06080790 Genuine Article#: XT948 Number of References: 63
Title: Amplification and subtraction methods and their application to the discovery of novel human viruses
Author(s): Muerhoff AS (REPRINT) ; Leary TP; Desai SM; **Mushahwar IK**
Corporate Source: ABBOTT LABS,VIRUS DISCOVERY GRP, D-90D, BLDG L3, 1401

SHERIDAN RD/N CHICAGO//IL/60064 (REPRINT)
Journal: JOURNAL OF MEDICAL VIROLOGY, 1997, V53, N1 (SEP), P96-103
ISSN: 0146-6615 Publication date: 19970900
Publisher: WILEY-LISS, DIV JOHN WILEY & SONS INC, 605 THIRD AVE, NEW YORK, NY 10158-0012
Language: English Document Type: REVIEW

32/3,AB/33 (Item 1 from file: 345)
DIALOG(R)File 345:Inpadoc/Fam.& Legal Stat

12176439
Basic Patent (No,Kind,Date): WO 9502070 A1 950119 <No. of Patents: 003>
CONFIRMATORY ASSAY AND REAGENTS FOR HEPATITIS E VIRUS (English)
Patent Assignee: ABBOTT LAB (US)
Author (Inventor): DAWSON GEORGE J; GUTIERREZ ROBIN A; PAUL DEBORAH A; KNIGGE MARK F
Designated States : (National) AU; CA; JP (Regional) AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LU; MC; NL; PT; SE
Filing Details: WO 100000 With international search report
IPC: *C12Q-001/70; C07K-007/00
CA Abstract No: *122(17)212105A; 122(17)212105A
Derwent WPI Acc No: *C 95-066912; C 95-066912
Language of Document: English
Patent Family:

Patent No	Kind	Date	Applic No	Kind	Date	
AU 9473184	A1	950206	AU 9473184	A	940628	
JP 8512406	T2	961224	JP 94504052	A	940628	
WO 9502070	A1	950119	WO 94US7280	A	940628	(BASIC)

Priority Data (No,Kind,Date):
US 89877 A 930709
WO 94US7280 W 940628
?

Set	Items	Description
S1	4228	HEPATITIS(W)E(W)VIRUS
S2	349	US(W)TYPE
S3	9	US(W)SUBTYPE
S4	0	U.S.(W)TYPE
S5	0	U.S.(W)SUBTYPE
S6	143	(US OR U.S.)(W)STRAIN? ?
S7	491	S2 OR S3 OR S6
S8	19	S1 AND S7
S9	14	RD (unique items)
S10	2033881	US OR U.S.
S11	331	S1 AND S10
S12	1264307	UNITED(W)STATES
S13	342	S1 AND S12
S14	547	S11 OR S13
S15	260	S14 NOT PY>1998
S16	181	RD (unique items)
S17	2219	S1/TI
S18	50	S17 AND S16
S19	214	AU="SCHLAUDER G" OR AU="SCHLAUDER G G" OR AU="SCHLAUDER G." OR AU="SCHLAUDER G.G." OR AU="SCHLAUDER GEORGE" OR AU="SCHLAUDER GEORGE G" OR AU="SCHLAUDER GG"
S20	165	AU="ERKER J" OR AU="ERKER J C" OR AU="ERKER J.C." OR AU="ERKER JAMES C" OR AU="ERKER JAMES CARL" OR AU="ERKER JC"
S21	876	AU="DESAI S" OR AU="DESAI S M"
S22	2	AU="DESAI S M; DAWSON G J; MUERHOFF A S; MUSHAHWAR" OR AU="DESAI S M; MUSHAHWAR I K; CHALMERS M; DAWSON G"
S23	1273	AU="DAWSON G" OR AU="DAWSON G J"
S24	79	AU="DAWSON G.J."
S25	79	AU="DAWSON GEORGE" OR AU="DAWSON GEORGE J"
S26	611	AU="MUSHAHWAR I" OR AU="MUSHAHWAR I K" OR AU="MUSHAHWAR I." OR AU="MUSHAHWAR I.K." OR AU="MUSHAHWAR IK" OR AU="MUSHAHWAR ISA"
S27	117	AU="MUSHAHWAR ISA K" OR AU="MUSHAHWAR ISA K DR" OR AU="MUSHAHWAR ISA KHAMIS" OR AU="MUSHAHWAR ISAH K"
S28	2877	S19 OR S20 OR S21 OR S22 OR S23 OR S24 OR S25 OR S26 OR S27
S29	151	S1 AND S28
S30	105	S29 NOT PY>1998
S31	48	RD (unique items)
S32	40	S31 NOT S18

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